
Vol. 70 1978/79

CHROMOSOMA

Editorial Board

H. BAUER, Erlangen

Managing Editor

W. BEERMANN, Tübingen

J. G. GALL, New Haven

B. JOHN, Canberra

H. C. MACGREGOR, Leicester

R. B. NICKLAS, Durham

M. L. PARDUE, Cambridge, Mass.

J. SYBENGA, Wageningen

J. H. TAYLOR, Tallahassee

D. von WETTSTEIN, Copenhagen

Advisory Board

R. DIETZ, Tübingen

J. E. EDSTRÖM, Stockholm

W. HENNIG, Nijmegen

T. C. HSU, Houston

H.-G. KEYL, Bochum

C. D. LAIRD, Seattle

G. F. MEYER, Tübingen

D. SCHWEIZER, Wien

H. STERN, La Jolla



Springer International

The exclusive copyright for all languages and countries, including the right for photomechanical and any other reproductions, also in microform, is transferred to the publisher.

The use of registered names, trademarks etc. in this publication does not imply, even in the absence of a specific statement, that such names are exempt from the relevant protective laws and regulations and therefore free for general use.

Alle Rechte, einschließlich das der Übersetzung in fremde Sprachen und das der fotomechanischen Wiedergabe oder einer sonstigen Vervielfältigung, auch in Mikroform, vorbehalten. Jedoch wird gewerblichen Unternehmen für den innerbetrieblichen Gebrauch nach Maßgabe des zwischen dem Börsenverein des Deutschen Buchhandels e.V. und dem Bundesverband der Deutschen Industrie abgeschlossenen Rahmenabkommens die Anfertigung einer fotomechanischen Vervielfältigung gestattet. Wenn für diese Zeitschrift kein Pauschalabkommen mit dem Verlag vereinbart worden ist, ist eine Wertmarke von DM 0,40 pro Seite zu verwenden. *Der Verlag läßt diese Beträge den Autorenverbänden zufließen.*

Die Wiedergabe von Gebrauchsnamen, Handelsnamen, Warenbezeichnungen usw. in dieser Zeitschrift berechtigt auch ohne besondere Kennzeichnung nicht zu der Annahme, daß solche Namen im Sinne der Warenzeichen- und Markenschutz-Gesetzgebung als frei zu betrachten wären und daher von jedermann benutzt werden dürften.

Springer-Verlag Berlin · Heidelberg · New York

Printed in Germany by Universitätsdruckerei H. Stürtz AG, Würzburg

© by Springer-Verlag Berlin · Heidelberg 1978/79

Table of Contents Volume 70

No. 1 pp. 1-140 issued on 21.12.1978

No. 2 pp. 141-276 issued on 8. 1.1979

No. 3 pp. 277-392 issued on 31. 1.1979

Adkisson, K.P., s. Perreault et al.	31
Ananiev, E.V., Gvozdev, V.A., Ilyin, Y.V., Tchurikov, N.A., Georgiev, G.P.: Reiterated Genes with Varying Location in Intercalary Heterochromatin Regions of <i>Drosophila melanogaster</i> Polytene Chromosomes	1
Andronico, F., s. Nardi et al.	91
Appels, R., Driscoll, C., Peacock, W.J.: Heterochromatin and Highly Repeated DNA Sequences in Rye (<i>Secale cereale</i>)	67
Arrighi, F., s. Wheeler et al.	41
Barsacchi-Pilone, G., s. Nardi et al.	91
Bogdanov, Yu.F., s. Kundu	375
Burkholder, G.D., Wang, H.C.: Electron Microscopy of Differentially BrdU-substituted Sister Chromatids Treated with Sodium Phosphate	101
Byers, B., s. Schild	109
Cardoso, H., Dutra, A.: The Neo-X Neo-Y Sex Pair in Acrididae, Its Structure and Association	323
Carrano, A.V., s. Sawin et al.	293
Cobel-Geard, S.R., s. Perreault et al.	31
Cockburn, A.F., Taylor, W.C., Firtel, R.A.: <i>Dictyostelium</i> rDNA Consists of Nonchromosomal Palindromic Dimers Containing 5S and 36S Coding Regions	19
Comings, D.E., s. Stack	161
Cordeiro-Stone, M., s. Wheeler et al.	41
Das, B.C., Raman, R., Sharma, T.: Chromosome Condensation and Hoechst 33258 Fluorescence in Meiotic Chromosomes of the Grasshopper <i>Spathosternum prasiniferum</i> (Walker)	251
Dodge, J.D., s. Oakley	277
Driscoll, C., s. Appels et al.	67
Dutra, A., s. Cardoso	323
Firtel, R.A., s. Cockburn et al.	19
Fuge, H.: Synapsis, Desynapsis, and Formation of Polycomplex-like Aggregates in Male Meiosis of <i>Pales ferruginea</i> (Diptera, Tipulidae)	353
Gay, H., s. Perreault et al.	31
Georgiev, G.P., s. Ananiev et al.	1
Giraldez, R., s. Santos	59
Goldstein, P., Triantaphyllou, A.C.: Karyotype Analysis of <i>Meloidogyne hapla</i> by 3-D Reconstruction of Synaptonemal Complexes from Electron Microscopy of Serial Sections	131
Gvozdev, V.A., s. Ananiev et al.	1
Hägele, K.: Characterization of Heterochromatin in <i>Schistocerca gregaria</i> by C- and N-Banding Methods	239
Hamilton, A.E., s. Moses et al.	141
Hsu, T.C., s. Pathak	195
Ilyin, Y.V., s. Ananiev et al.	1
Israelowski, N.: The Relation of Radiation Sensitivity to Pronuclear Chromosome Structure. II. Differences in Radiation Sensitivity Between Two Stocks of <i>Phryne cincta</i> Characterized by Low or High Crossing-over Frequency	263
Karatsis, P.A., s. Moses et al.	141
Kundu, S.C., Bogdanov, Yu.F.: Ultrastructural Studies of Late Meiotic Prophase Nuclei of Spermatocytes in <i>Ascaris suum</i>	375
Kuo, M.T.: Studies in Heterochromatin DNA: Accessibility of Late Replicating Heterochromatin DNA in Chromatin to Micrococcal Nuclease Digestion	183
Lee, C.S., s. Wheeler et al.	41
Lucchini, S.De, s. Nardi et al.	91

Maguire, M.P.: An Indirect Test for a Role of the Synaptonemal Complex in the Establishment of Sister Chromatid Cohesiveness	313
Moses, M.J., Karatsis, P.A., Hamilton, A.E.: Synaptonemal Complex Analysis of Heteromorphic Trivalents in <i>Lenmur</i> Hybrids	141
Motara, M.A., Rai, K.S.: Giemsa C-Banding Patterns in <i>Aedes (Stegomyia)</i> Mosquitoes	51
Nardi, I., Lucchini, S. De, Barsacchi-Pilone, G., Andronico, F.: Chromosome Location of the Ribosomal RNA Genes in <i>Triturus vulgaris meridionalis</i> (Amphibia, Urodela). IV. Comparison between in situ Hybridization with ^3H 18S + 28S rRNA and AS-SAT Staining	91
Neuhaus, P., s. Webb	205
Oakley, B.R., Dodge, J.D.: Evidence for a Double-helically Coiled Toroidal Chromonema in the Dinoflagellate Chromosome	277
Pathak, S., Hsu, T.C.: Silver-stained Structures in Mammalian Meiotic Prophase	195
Peacock, W.J., s. Appels et al.	67
Perreault, W.J., Adkisson, K.P., Cobel-Geard, S.R., Gay, H.: The Location of Highly Repetitious DNA in the Somatic Chromosomes of <i>Drosophila melanogaster</i>	31
Piñon, R.: A Probe Into Nuclear Events During the Cell Cycle of <i>Saccharomyces cerevisiae</i> : Studies of Folded Chromosomes in <i>cde</i> Mutants which Arrest in G_1	337
Rai, K.S., s. Motara	51
Raman, R., s. Das et al.	251
Renkawitz-Pohl, R.: Proportional Polyploidization of 5S RNA Genes in the Ovary of <i>Drosophila melanogaster</i> Mutants Containing Three 5S RNA Gene Loci	305
Rieger, R., s. Schubert	385
Rowley, J.D., s. Sawin et al.	293
Rutledge, M.H.: A Simple Procedure for Obtaining Autoradiographs of G-Banded Chromosomes	259
Santos, J.L., Giraldez, R.: The Effect of C-Heterochromatin in Chiasma Terminalisation in <i>Chorthippus biguttulus</i> L. (<i>Acrididae</i> , <i>Orthoptera</i>)	59
Sawin, V.L., Rowley, J.D., Carrano, A.V.: Transcription and Hybridization of ^{125}I -cRNA from Flow Sorted Chromosomes	293
Schild, D., Byers, B.: Meiotic Effects of DNA-defective Cell Division Cycle Mutations of <i>Saccharomyces cerevisiae</i>	109
Schubert, I., Rieger, R.: Asymmetric Banding of <i>Vicia faba</i> Chromosomes after BrdU Incorporation	385
Sharma, T., s. Das et al.	251
Stack, S.M., Comings, D.E.: The Chromosomes and DNA of <i>Allium cepa</i>	161
Taylor, W.C., s. Cockburn et al.	19
Tchurikov, N.A., s. Ananiev et al.	1
Triantaphyllou, A.C., s. Goldstein	131
Wang, H.C., s. Burkholder	101
Webb, G.C., Neuhaus, P.: Chromosome Organisation in the Australian Plague Locust <i>Chortocetes terminifera</i> . 2. Banding Variants of the B-Chromosome	205
Wheeler, L.L., Arrighi, F., Cordeiro-Stone, M., Lee, C.S.: Localization of <i>Drosophila nasutoides</i> Satellite DNAs in Metaphase Chromosomes	41
Erratum: Hotta, Y., Stern, H.: Absence of Satellite DNA Synthesis During Meiotic Prophase in Mouse and Human Spermatocytes. <i>Chromosoma (Berl.)</i> 69, 323-330 (1978)	392

